

Recent IBM patents

The following patents were recently issued by the countries in which the inventions were made. For U.S. patents, titles and names supplied to us by the U.S. Patent Office are reproduced exactly as they appear on the original published patent.

France

191,111	J. F. Carle and P. Philippot	Improvements to Pulling Processes and Equipment for Growing Silicon Crystals Having High and Controlled Carbon Content
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Germany

392,606,606	A. Blum, M. Perske, and M. Schmidt	Micromechanical Compressor Cascade and Method of Increasing the Pressure at Extremely Low Operating Pressure
3,280,350,808	A. Lang and W. H. Sakmann	Transistor Power Amplifier with Reduced Switching Times
3,382,418,508	W. Ruppert	Closed Loop Print Quality Control
3,583,039,508	H. E. Korth	Read/Write Head for Optical Disks
3,584,247,408	R. Schaefer and W. D. Ruh	Method of Desmearing Holes
3,681,178,508	H. E. Korth	Rotary Access Arm for Optical Disks
3,681,591,808	A. T. Gericher, D. K. Dunkauf, J. H. Bleher, and S. M. Rump	Method and Circuit Arrangement for Adding Floating Point Numbers

Switzerland

308,537	A. H. Modrell, D. W. Pohl, and U. T. Duerig	Optical Distance Sensor for Applications as Profiler
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United Kingdom

249,661	B. Dickinson, D. J. Friend, I. G. Holden, P. H. Jackson, and R. J. Padzieski	Image Data Display System
2,194,656	P. Quarendon	Method and System for Solid Modelling

United States

4,757,207	R. E. Chappelow and L. P. Hayes	Measurement of Registration of Overlaid Test Patterns by the Use of Reflected Light
4,764,885	E. C. Greanias, K. F. Schroeder, and L. V. Ruffino	Minimum Parallax Stylus Detection Subsystem for a Display Device
4,765,397	G. M. Chrysler, R. C.-F. Chu, and R. E. Simmons	Immersion Cooled Circuit Module with Improved Fins
4,989,139	R. M. Friedman, G. W. Randall, R. J. Sheftic, and D. P. Spencer	Map Case Network Virtual Connection Interface System
5,000,592	C. R. Grady	Envelope Addressing Format Feature for Electronic Typewriters

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5,001,423	A. J. Abrami, S. H. Bullard, S. E. del Puerto, P. M. Gaschke, M. R. LaForce, P. J. Roggemann, and K. F. Longenbach	Dry Interface Thermal Chuck Temperature Control System for Semiconductor Wafer Testing
5,001,765	H. H. Jeanty	Fast Spatial Segmenter for Handwritten Characters
5,007,085	E. C. Greanias and R. L. Donaldson	Remotely Sensed Personal Stylus
5,008,902	G. R. Key and D. C. Black	Automatic Baud Rate Detection
5,019,210	N. J. Chou, R. D. Goldblatt, J. E. Heidenreich III, S. E. Molis, and L. M. Ferreiro	Method for Enhancing the Adhesion of Polymer Surfaces by Water Vapor Plasma Treatment
5,019,481	H. Ito	Aqueous Base Developable Negative Resist Compositions
5,019,963	G. R. Alderson, P. R. MacFarlane, and T. Mori	Data Processing Network with Upgrading of Files
5,021,129	G. V. Arbach, T. R. O'Toole, and A. Viehbeck	Multilayer Structures of Different Electroactive Materials and Methods of Fabrication Thereof
5,021,355	S. H. Dhong, W. Hwang, and N. C. Lu	Method of Fabricating Cross-Point Lightly Doped Drain-Source Trench Transistor
5,021,365	P. D. Kirchner, A. C. Warren, J. M. Woodall, and S. L. Wright	Compound Semiconductor Interface Control Using Cationic Ingredient Oxide to Prevent Fermi Level Pinning
5,021,688	S. Leforestier and D. Omet	Two Stage Address Decoder Circuit for Semiconductor Memories
5,021,906	S. H. Chang, F. Hendriks, V. D. Khanna, and E. G. Lean	Programmable Air Bearing Slider Including Magnetic Read/Write Element
5,022,010	Y. H. Chan	Word Decoder for a Memory Array
5,022,955	C. J. Chen	Apparatus and Method for Self-Induced Repair of Circuit Shorts and Near-Shorts
5,022,956	W. Cziep, U. Kuenzel, and W.-D. Ruh	Producing Viaholes in Plastic Sheets and Application of the Method
5,023,478	G. Boudon, P. Mollier, S. Ogura, D. Omet, P. Tannhof, and F. Wallart	Complementary Emitter Follower Drivers
5,026,470	P. I. Bonyhard, D. C. Cheng, W. J. Glover, H. A. Hendrix, E. S. Ward, and J. W. Williams	Sputtering Apparatus
5,026,624	R. A. Day, J. D. Gelorme, D. J. Russell, and S. J. Wih	Composition for Photo Imaging
5,026,682	G. J. Clark, R. J. Gambino, R. H. Koch, R. B. Laibowitz, A. D. Marwick, and C. P. Umbach	Devices Using High T_c Superconductors
5,026,975	W. Guber, J. Scheffel, and F. Wotzka	Bar Code Laser Scanner Arrangement for a Cashier Stand
5,027,183	D. M. Dreps	Isolated Semiconductor Macro Circuit
5,027,253	J. M. Lauffer and R. A. Schumacher	Printed Circuit Boards and Cards Having Buried Thin Film Capacitors and Processing Techniques for Fabricating Said Boards and Cards
5,027,254	W. D. Corfits, M. F. Holahan, S. J. Martino, D. R. Motschman, and J. R. Thorpe	Apparatus for Cooling Electronics Components
5,027,269	J. D. Grant, J. L. Hall, and B. C. Housel III	Method and Apparatus for Providing Continuous Availability of Applications in a Computer Network
5,027,291	R. M. Callahan and B. C. Hempel	Application Exit for Potentially Pickable Primitives in a Graphics System
5,027,292	J. R. Rossignac, D. A. Epstein, N. Gharachorloo, F. W. Jansen, and C. S. Zoulas	Multiple Depth Buffers for Graphics and Solid Modelling
5,027,316	B. J. Frantz and S. E. Hellstrom	Versioning of Message Format in a 24-Hour Operating Environment
5,027,397	G. P. Double and S. H. Weingart	Data Protection by Detection of Intrusion into Electronic Assemblies
5,028,825	C. A. Smith and G. K. Woodworth	Self-Powered SCR Gate Drive Circuit with Optical Isolation
5,028,925	M. Ferry, J.-P. Pantani, G. Orenco, and G. Richter	Sigma-Delta Converter with Improved Transfer Function
5,028,983	H. R. Bickford, M. F. Bregman, T. M. Cipolla, J. Gow III, P. G. Ledermann, E. F. Miersch, L. T. Olson, D. P. Pagnani, T. C. Reiley, U.-P. E. Tsou, and W. V. Vilkelis	Multilevel Integrated Circuit Packaging Structures
5,028,984	J. G. Ameen, J. Funari, B. G. Sammakia, D. W. Sissenstein, Jr., and S. L. Smey	Epoxy Composition and Use Thereof
5,029,029	M. R. Hatchett, A. R. Hearn, J. S. Heath, C. M. Lacey, T. L. Larek, J. R. Reidenbach, and C. R. Schwieters	Linear Actuator with Reduced Wear Guide Way
5,029,030	F. S. Luecke	Rotary Actuator System with Zero Skew Angle Variation
5,029,038	K. R. Covi and D. P. Rearick	Dual Resistance Bus Connector
5,029,077	F. H. Fatahalian, L. A. Halliday, and K. D. Nguyen	System and Method for Controlling Physical Resources Allocated to a Virtual Terminal

5,029,102	A. D. Drumm and C. P. Sweet	Logical Synthesis
5,029,104	G. W. Dodson and M. O. Mitchell	Prestaging Objects in a Distributed Environment
5,029,107	J. C. Lee	Apparatus and Accompanying Method for Converting a Bit-Mapped Monochromatic Image to a Grey-Scale Image Using Table Look-Up Operations
5,029,159	D. Dolev	Method and Means for Leader Choosing on a Token Ring System
5,029,223	T. Fujisaki	Constraint Driven On-Line Recognition of Handwritten Characters and Symbols
5,029,242	M. Sammet	Glass-Ceramic Structure and Method for Making Same
5,029,555	H. P. Dietrich, H. Ott, and D. J. Webb	Wafer Holder Method and Apparatus in a Vacuum Deposition System
5,030,114	J. J. Carey and F. E. Noel, Jr.	Shield Overcoat
5,030,260	J. L. Beck, C. A. Brown, T. P. Fracek, N. F. Misso, L. Volpe, H. R. Wendt, and T. A. Gregory	Disk Drive Breather Filter
5,030,478	L.-J. J. Lin and D. D. Saperstein	Process for Bonding Lubricants to Thin Film Recording Media
5,030,494	R. H. Ahlert, J. K. Howard, K. K. Kim, I. L. Sanders, and A. W. Wu	Carbon Overcoat for a Thin Film Magnetic Recording Disk Containing Discrete Clusters of Tungsten (W) or Tungsten Carbide (WC) which Project from the Surface of the Overcoat
5,030,512	Y. Kato, T. Shimizu, S. Takayama, and H. Tanaka	Magneto-Optical Recording Medium
5,030,856	A. H. Dansky, C. J. Rebeor, and D. C. Reedy	Receiver and Level Converter Circuit with Dual Feedback
5,030,909	A. U. Biancha, R. Clauberg, E. H. Rothaus, and H. K. Seitz	Method and System for Contactless Testing of Electronic Activity in an Integrated Circuit Chip-to-Test after Passivation Thereof
5,031,029	J. Acocella, N. Bakhru, A. Grill, E. Marotta, B. S. Meyerson, and V. V. Patel	Copper Device and Use Thereof with Semiconductor Devices
5,031,075	W. J. Casanova, W. D. Corfits, R. F. Dimmick, G. A. Thompson, J. R. Thorpe, and S. E. Wheeler	Doubled-Sided Logic Cage
5,031,096	A. K. Jen and A. Y. Ngai	Method and Apparatus for Compressing the Execution Time of an Instruction Stream Executing in a Pipelined Processor
5,031,117	B. L. Minor, J. A. Wilkinson, and E.-S. Wu	Prioritization Scheme for Enhancing the Display of Ray Traced Images
5,031,138	K. K. Maas and D. T. Shen	Improved Ratio Decoder for Use in a Non-Restoring Binary Division Circuit
5,031,151	J. A. Fifield, H. L. Kalter, C. P. Miller, and S. W. Thomashot	Wordline Drive Inhibit Circuit Implementing Wordline Redundancy Without an Access Time Penalty
5,031,195	P. E. Chevillat and E. Eleftheriou	Fully Adaptive Modem Receiver Using Whitening Matched Filtering
5,031,217	M. Nishimura	Speech Recognition System Using Markov Models Having Independent Label Output Sets
5,031,223	W. S. Rosenbaum and J. J. Hilliard	System and Method for Deferred Processing of OCR Scanned Mail
5,031,526	E. F. Helinski and T. J. Kotasek	Lubrication System for a Print Hammer Mechanism and Assembly
5,031,993	R. Asthana, R. D. Miller, F. M. Schellenberg, G. T. Sincerbox, and J. M. Zavislan	Detecting Polarization State of an Optical Wavefront
5,032,219	P. L. Buchmann, P. Vettiger, O. Voegeli, and D. J. Webb	Method for Improving the Planarity of Etched Mirror Facets
5,032,708	L. D. Comerford and V. E. Shrauger	Write-Once-Read-Once Batteryless Authentication Token
5,032,897	M. S. Mansuria, J. M. Mosley, R. D. Musa, W. F. Shutler, and V. J. Tuozzolo	Integrated Thermoelectric Cooling
5,032,879	P. L. Buchmann, C. S. Harder, and O. Vogeli	Integrated Semiconductor Diode Laser and Photodiode Structure
5,032,935	S. A. Jove, K. B. Klaassen, and L. Tran	Amplification of Signals Produced by a Magnetoresistive Element
5,032,945	B. E. Argyle, T. C. Arnoldussen, T. J. Beaulieu, D. A. Herman, Jr., S. Krongelb, H. P. E. Lee, D. A. Nepela, B. Petek, L. T. Romankiw, and J. C. Slonczewski	Magnetic Thin Film Structures Fabricated with Edge Closure Layers
5,032,952	K. K. Cooke, D. Crompton, J. R. Dewitt, and P. A. Kerezman	Pivoting Power Supply
5,032,979	M. S. Hecht, A. Johri, T. T. Wei, and D. H. Steves	Distributed Security Auditing Subsystem for an Operating System
5,032,985	B. W. Curran, J. D. D'Onofrio, R. N. Fuqua, R. D. Herzl, L. J. Milich, P. M. Moore, and J. L. Temple III	Multiprocessor System with Memory Fetch Buffer Invoked During Cross-Interrogation
5,033,008	B. A. Barker, T. R. Edel, and J. A. Stark	Dynamic Selection of Logical Element Data Format as a Document is Created or Modified

5,033,049	D. S. Keener, A. B. McNeill, and K. L. Scheiern	On-Board Diagnostic Sub-System for SCSI Interface
5,033,087	L. R. Bahl, P. F. Brown, P. V. DeSouza, and R. L. Mercer	Method and Apparatus for the Automatic Determination of Phonological Rules as for a Continuous Speech Recognition System
5,033,104	T. Amano	Method for Detecting Character Strings
5,034,348	T. J. Hartswick, C. W. Kaanta, P.-I. P. Lee, and T. M. Wright	Process for Forming Refractory Metal Silicide Layers of Different Thickness in an Integrated Circuit
5,034,746	G. A. Herbst and D. M. Jones	Analog-to-Digital Converter for Computer Disk File Servo Position Error Signal
5,034,787	S. H. Dhong and W. Hwang	Structure and Fabrication Method for a Double Trench Memory Cell Device
5,035,778	P. Bindra, K. L. Covert, and D. N. Light	Regeneration of Spent Ferric Chloride Etchants
5,036,022	T. F. Kuech and M. A. Tischler	Metal Organic Vapor Phase Epitaxial Growth of Group III-V Semiconductor Materials
5,036,215	R. P. Masleid and R. F. Sechler	Pass Gate Multiplexer Receiver Circuit
5,036,218	G. A. Jaquette	Antisaturation Circuit
5,036,495	R. E. Busch, W. P. Hovis, T. M. Redman, E. P. Thoma, and J. A. Yankosky	Multiple Mode-Set for IC Chip
5,036,514	R. W. Downes, W. E. Smith, R. E. Suci, and K. T. Wilson	Apparatus and Method for Isolating and Predicting Errors in a Local Area
5,035,778	P. Bindra, K. L. Covert, and D. N. Light	Regeneration of Spent Ferric Chloride
5,036,630	C. W. Kaanta and H. S. Landis	Radial Uniformity Control of Semiconductor Wafer Polishing System
5,037,202	J. S. Batchelder and M. A. Taubenblatt	Measurement of Size and Refractive Index of Particles Using the Complex Forward-Scattered Electromagnetic Field
5,037,311	J. A. Frankeny, R. F. Frankeny, J. Haj-Ali-Ahmadi, K. Hermann, and R. L. Imken	High Density Interconnect Strip
5,037,776	Y. Galeuchet, V. Graf, W. Heuberger, and P. Roentgen	Method for the Epitaxial Growth of a Semiconductor Structure
5,038,138	A. A. Akiyama, L. J. H. Busboom, and W. J. Maitland, Jr.	Display with Enhanced Scrolling Capabilities
5,038,142	D. R. Flowers, P. Gallarelli, K. P. Goffinet, A. W. Miles, C. A. Rudisill, and K. H. Vorhees	Touch Sensing Display Screen Apparatus
5,038,192	M. Bonneau, E. Gouze, R. Hornung, I. Ong, and J.-M. Piccino	Gate Array Cell Having FETs of Different and Optimized Sizes
5,038,239	G. M. Vettel, J. M. Rigotti, and L. R. Tufty	Integrated Electronic Card-Frame Assembly for a Rigid Disk Drive
5,038,281	A. M. Peters	Acceleration of System Interrupts Between Operating Systems in Guest-Host Relationship
5,038,320	C. A. Heath, J. K. Langgood, and R. E. Valli	Computer System with Automatic Initialization of Pluggable Option Cards
5,038,321	B. J. Van Zegbroeck	Eraseable Electro-Optic Storage Disk, Method of and Apparatus for Recording and Reading Data Therefor
5,038,333	W. W. Chow, A. A. Fennema, B. C. Fiorino, I. E. Henderson, R. J. Kadlec, and S. D. Roberts	Positioning Systems Including Reliable Track Crossing Detection for High Speed Relative Motions
5,038,343	G. Lebizay, M. Demange, A. Milewski, and A. Vedrenne	High Speed Digital Packet Switching System
5,038,352	W. Lenth and W. P. Risk	Laser System and Method Using a Nonlinear Crystal Resonator
5,038,365	J. Belloc, D. Pilost, and M. Quintin	Modem Having a Software-Adapted Modulation Rate
5,038,382	J. S. Lipscomb	Multi-Scale Recognizer for Hand Drawn Strokes
5,038,386	H. Li	Polymorphic Mesh Network Image Processing System
5,038,392	J. K. Morris, R. E. Probst, and R. A. Utley	Method and Apparatus for Adaptive Image Processing by Recognizing a Characterizing Indicum in a Captured Image of a Document
5,038,996	J. R. Wilcox and C. G. Woychik	Bonding of Metallic Surfaces
5,039,182	R. R. Dube and U. Sarid	Storing Information in Dual Holographic Images
5,039,192	S. Basu	Interconnection Means for Optical Waveguides
5,039,194	T. R. Block, M. B. Ebler, L. W. Freitag, G. M. Heiling, S. C. Holter, D. L. Karst, D. W. Siljeborg, R. L. Soderstrom, and J. T. Trnka	Optical Fiber Link Card
5,039,201	K. Liu	Double-Pass Tunable Fabry-Perot Optical Filter
5,039,569	C. R. Jones and R. A. Susko	Surface Modification of Organic Materials to Improve Adhesion
5,039,939	C. J. Dick, B. J. Ditmyer, T. L. Jeremiah, L. Jones, and G. S. Still	Calculating AC Chip Performance Using the LSSD Scan Path
5,039,952	D. M. Dreps and R. P. Rizzo	Electronic Gain Cell

5,039,986	C. J. Georgiou	High Speed Dynamic Allocator for Various Length Time Slots
5,040,130	F.-C. Chang, J. A. Donnelly, R. A. Marino, and T. W. Lindgren	Computer Graphics Boundary—Defined Area Clipping and Extraneous Edge Deletion Method
5,040,131	R. J. Torres	Graphical Processing
5,040,145	J. E. Andersen, R. L. Barry, J. N. Bisnett, and E. G. Fung	Memory Cell with Active Write Load
5,040,169	R. A. Guerin and Y.-C. Lien	Wavelength Division Photonic Switch
5,040,176	T. P. Barzilai, M.-S. Chen, B. K. Kadaba, and M. A. Kaplan	Intra-Node Pacing for High Speed Networks
5,040,208	C. H. Jolissaint	Coordinated Voice and Data Display Having Temporary Storage of Transaction Data
5,041,358	M. Hatzakis, J. M. Shaw, and K. J. Stewart	Negative Photoresist and Use Thereof
5,041,470	J. D. Gelorme and E. R. Skarvinko	Flame Retardant Photocurable Adhesive for Wires and Circuit Boards
5,041,798	W. A. Moorman and T. M. Slater	Time Reference with Proportional Steering
5,041,912	E. S. Schlig and Y. L. Yao	Averaging Array for CCD Imagers
5,042,034	A. Correale, Jr., R. M. Doney, K. E. O'Donnell, A. Kegl, E. A. Tate, and D. M. Wu	By-Pass Boundary Scan Design
5,042,668	R. E. Hunt and V. E. Whitehead	Method and Apparatus for Random Electronic Component Testing
5,042,671	R. E. Bischoff, M. A. Brandon, J. J. Caulfield, L. G. Cook, and G. B. Uplinger	Versatile Product Carrier
5,042,708	P. G. Ledermann, A. L. Leerssen, A. D. Nguyen, and R. E. Prime	Solder Placement Nozzle Assembly
5,042,709	M. F. Cina, M. S. Cohen, E. B. Flint, K. R. Grebe, D. J. Hall, K. P. Jackson, and M. M. Oprysko	Methods and Apparatus for Precise Alignment of Objects
5,043,577	W. D. Pohl and C. W. Schneiker	Distance-Controlled Tunneling Transducer
5,043,578	P. H. Guethner, H. J. Mamin, and D. Rugar	Writing Atomic Scale Features with Fine Tip as Source of Deposited Atoms
5,043,586	G. J. Giuffre, M. A. Sturans, J. F. White, and R. R. Wilbarg	Planarized Reusable Calibration Grids
5,043,674	A. R. Bonaccio and J. E. Gersbach	Differential Receiver with High Common-Mode Range
5,043,786	B. H. Disilets, C.-M. Hsieh, and L. L. Hsu	Lateral Transistor and Method of Making Same
5,043,789	H. G. Linde and R. Previti-Kelly	Planarizing Silsequioxane Copolymer Coating
5,043,834	M. Kubo, Y. Masuda, and Y. Nakagawa	Actuator Locking System of Disk Unit
5,043,866	W. W. Myre, Jr. and C.-F. Shih	Soft Checkpointing System Using Log Sequence Numbers Derived from Stored Data Pages and Log Records for Database Recovery
5,043,872	J. M. Cheng, A. Shibamiya, and Y. Wang	Access Path Optimization Using Degrees of Clustering
5,043,876	C. R. Terry	N-Level File Shadowing and Recovery in a Shared File System
5,043,877	E. R. Berger and H. T. Olnowich	Architecture Converter for Slave Elements
5,043,879	F. Conca and J. M. Loffredo	PLA Microcode Controller
5,043,885	J. T. Robinson	Data Cache Using Dynamic Frequency Based Replacement and Boundary Criteria
5,043,919	J. R. Callaway, J. M. McConaughy, S. T. Pancoast, and J. M. Thompson	Method of and System for Updating a Display Unit
5,043,921	J. Gonzalez-Lopez and T. P. Lanzoni	High Speed Z-Buffer Control
5,043,922	T. Matsumoto	Graphics System Shadow Generation Using a Depth Buffer
5,043,931	R. C. Kovach and B. S. McDonald	Wrap Test System and Method
5,043,937	R. Glaise, Y. Hartmann, P. Huon, and M. Peyronnenc	Efficient Interface for the Main Store of a Data Processing System
5,043,967	L. E. Gregg and R. K. Rolfe	Structured Data Storage Method and Medium
5,046,069	J. Calvignac, M. Dauphin, R. Lenoir, and J.-L. Picard	Data Integrity Securing Means
5,046,099	M. Nishimura	Adaption of Acoustic Prototype Vectors in a Speech Recognition System